CASE SUMMARY

Case #2011/1105

Complainant: Patty Smith
0410 North 500 West
Marion, Indiana 46953
765-661-4175

Applicator: Harry Callahan — Registered Technician
Grant County Lawn and Pest, Inc. — Licensed Business
707 North Miller Avenue
Marion, Indiana 46952
765-384-5219

1. On June 23, 2011, I, Agent Kevin Gibson of the Office of Indiana State Chemist (OISC), performed an investigation at the complainant's property in response to a claim of injury/damage to several variety of non-target trees possibly resulting from exposure to the herbicide Imprelis. A Notice of Inspection was issued to Patty Smith. I observed the following during my on-site investigation:
   a) White pine with curled and twisted needles throughout tree (see figure #1).
   b) Close-up of tree (see figure #2)
   c) Spruce with browning tips throughout tree (see figure #3)
   d) Close-up of needle tips (see figure #4)

2. I took the following photos depicting injured/damaged vegetation:

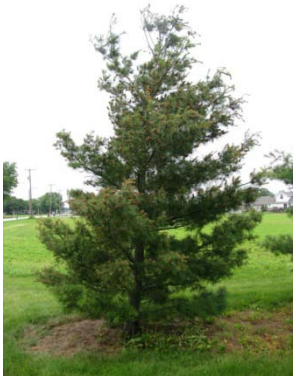
Figure #1


Figure #2

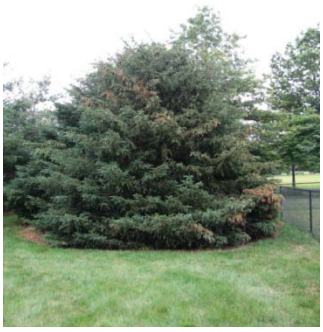
Figure #3


Figure #4

3. I collected the following vegetation samples from visibly impacted non-target vegetation as described in paragraph #1 for examination by the Purdue Plant Pest Diagnostic Laboratory (PPDL):
   a) Spruce
   b) White Pine
   c) Locust
   d) Redwood

4. I collected the following environmental samples for chemical analysis by the OISC Residue Laboratory:
    a) Vegetation sample from yard (White Pine)
    b) Vegetation sample from yard (Spruce)
    c) Composite soil sample from yard

    NOTE: A decision was made by OISC management to not analyze these environmental samples. That decision was based on: 1) the large number of similar cases being investigated by OISC at the same time; 2) the large number of similar environmental samples already analyzed that had produced applicable representative results consistent with the presence of visible exposure symptoms; 3) the expertise developed by OISC investigators through repetition to identify Imprelis exposure symptoms without chemical confirmation.

5. According to a report from the PPDL, "*No infectious plant pathogen was found to be associated with the symptoms of foliar distortion observed on the two samples submitted (honey locust and deciduous conifer). The sample submitted show symptoms that are associated with injury caused by synthetic auxin (growth regulator type) herbicides. Typical symptoms caused by these herbicides can include epinasty (twisting and curving) of the leaves or needles, shoot and shoot tip; leaf cupping which can be upward or downward, and in extreme cases, new leaves can be irregular in size and shape (usually smaller than normal) and have abnormal leaf margins.*

6. According to the application information collected from the applicator Imprelis Herbicide (EPA Reg. No. 352-793) was applied on April 19, 2011 and completed on April 30, 2011, at the rate of 4.5 oz. / acre by tank spray equipment; no application was made to the soil within the drip line of any of the trees or ornamentals; no application was made directly to any exposed roots of any trees or ornamentals.

Kevin W. Gibson
Pesticide Investigator

Date: September 28, 2011

Disposition: No violation of the Indiana Pesticide Use and Application Law was documented against the pesticide applicator. Effective September 15, 2011, the Indiana registration for Imprelis Herbicide, EPA Reg. #352-793, was cancelled because it was determined by OISC that the product is "misbranded" (it bears label directions that are inadequate to prevent unreasonable adverse effects to non-target vegetation).

George N. Saxton
Compliance Officer

Final Date: October 20, 2011